TITLE II CHAPTER 3 BUILDING CODE

Section 1 ADOPTION OF THE BUILDING CODE

II-3-1.01 The 2001 Edition of the California Building Code, Volumes 1 and 2, California Building Standards Code, known as the California Code of Regulations, Title 24, incorporating the Uniform Building Code, Volumes 1 and 2, 2000 Edition, including Appendix Chapters 3, Division II, 15, 18, 23 and 31, Divisions I, II and III, published by the International Conference of Building Officials, with the amendments set forth in Section II-3-2.00 is hereby adopted. There is one copy of said code on file in the office of the Chief Building Official for use and examination by the public.

Section 2 AMENDMENTS TO THE 2001 CALIFORNIA BUILDING CODE

- II-3-2.01 The California Building Code, 2001 Edition is amended or changed in the following respects:
- II-3-2.02 Section 213 of the California Building Code, 2001 Edition, is amended by adding the following definition:

Light Frame Construction: Light-Frame Construction is a type of construction whose vertical and horizontal structural elements are primarily framed by a system of repetitive wood or light gauge steel framing members, and which does not use structural concrete as a floor or roof diaphragm.

- II-3-2.03 Chapter 1 of the California Building Code, 2001 Edition, is deleted in its entirety.
- II-3-2.04 Add Section 312.9 to read as follows:

312.9 **Flammable Vapor Ventilation.** In enclosed private garages attached to R occupancies, provide 1 sq. ft. of ventilation area located at the lower 12" of garage wall. Said ventilation areas shall be directly communicable with the exterior, but shall not be installed where protection of openings is required.

- II-3-2.05 Amend Section 310.9 to read as follows:
 - 310.9 Smoke Detector, Sprinkler Systems and Spark Arresters
- II-3-2.06 The Exception to Section 310.9.1.2 of the California Building Code, 2001 Edition, is deleted in its entirety.

II-3-2.07 Section 310.9.1.6 is added to the California Building Code, 2001 Edition, to read as follows:

310.9.1.6 Additions, alterations or repairs to Group R Occupancies. When the valuation of an addition, alteration or repair to a Group R Occupancy exceeds \$1,000 and a permit is required, or when one or more sleeping rooms are added or created in existing Group R Occupancies, chimney spark arresters shall be installed. Spark arresters shall be constructed in conformance with Section 3102.3.8.

II-3-2.08 Section 1503.4 is added to the California Building Code, 2001 Edition, to read as follows:

1503.4 **Roofing.** Class A or Class B roof covering shall be required for all Hillside Construction.

II-3-2.09 Sections 1612.2.1, 1612.3.1 and 1612.3.2 of the California Building Code, 2001 Edition, are amended to read as follows:

1612.2.1 **Basic load combinations.** Where Load and Resistance Factor Design (Strength Design) is used, structures and all portions thereof shall resist the most critical effects from the following combinations of factored loads:

1.4D	(12-1)
1.2D + 1.6L + 0.5 (L, or S)	(12-2)
$1.2D + 1.6 (L, \text{ or S}) + (f_1 L \text{ or } 0.8 \text{ W})$	(12-3)
$1.2D + 1.3W + (f_1L + 0.5 (L, or S)$	(12-4)
$1.2D \pm 1.0E + (f_1L + f_2S)$	(12-5)
$0.9D \pm (1.0 \delta E_h \text{ or } 1.3W)$	(12-6)

WHERE:

 f_1 = 1.0 for floors in places of public assembly, for live loads in excess of 100 psf (4.9 kN/m2), and for garage live load.

= 0.5 for other live loads.

 $f_2 = 0.7$ for roof configurations (such as saw tooth) that do not shed snow off the structure.

= 0.2 for other roof configurations.

EXCEPTIONS: 1. Factored load combinations for concrete per Section 1909.2 where load combinations do not include seismic forces.

2. Where other factored load combinations are specifically required by the provisions of this code.

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1612.3.1 **Basic load combinations.** Where allowable stress design (working stress design) is used, structures and all portions thereof shall resist the most critical effects resulting from the following combinations of loads:

D	(12-7)
D + L + (Lr or S)	(12-8)
D + (W or E1/1.4)	(12-9)
0.9D±.E/1.4	(12-10)
D+0.75[L+(Lr or S)+(WorE/14)]	(12-11)

No increase in allowable stresses shall be used with these load combinations except as specifically permitted elsewhere in this code and the duration of load increase permitted in Division III of Chapter 23.

1612.3.2 **Alternate basic load combinations.** In lieu of the basic load combinations specified in Section 1612.3.1, structures and portions thereof shall be permitted to be designed for the most critical effects resulting from the following load combinations. When using these alternate basic load combinations, a one-third increase shall be permitted in allowable stresses for all combinations including *W* or *E* but not concurrent with the duration of load increase permitted in Division III of Chapter 23.

(12-12)		
(12-13)		
(12-14)		
(12-15)		
(12-16)		
(12-16-1)		

EXCEPTIONS:

- 1. Crane hook loads need not be combined with roof live load or with more than three fourths of the snow load or one half of the wind load.
- 2. Design snow loads of 30 psf (1.44 kN/m 2) or less need not be combined with seismic loads. Where design snow loads exceed 30 psf (1.44 kN/m 2), the design snow load shall be included with seismic loads, but may be reduced up to 75 percent where consideration of siting, configuration and load duration warrant when approved by the Chief Building Official.
- II-3-2.10 Section 1618 of the California Building Code, 2001 Edition is amended by adding the following at the end of the first paragraph:

Hillside construction - construction in hillside areas shall be designed for a basic wind speed of 80 mph and Exposure C. All structures located in the hillside shall conform to requirements of Appendix Chapter 23, Conventional Light Frame Construction in High Wind Areas.

- II-3-2.11 Sections 1629.4.2 and 1629.6 of the California Building Code, 2001 Edition, are amended to read as follows:
 - 1629.4.2 **Seismic Zone 4 near-source factor.** In Seismic Zone 4, each site shall be assigned a near-source factor in accordance with Table I6-S and the Seismic Source Type set forth in Table I6-U. The value of *Na* used in determining C_a need not exceed 1.1 for structures complying with all the following conditions:
 - 1. The soil profile type is S_A , S_B , S_C or S_D .
 - 2. ρ = 1.0.
 - 3. Except in single-story structures, Group R, Division 3 and Group U, Division 1 Occupancies, moment frame systems designated as part of the lateral-force-resisting system shall be special moment-resisting frames.
 - 4. The provisions in Sections 9.6a and 9.6b of AISC Seismic Part 1 shall not apply, except for columns in one-story buildings or columns at the top story of multistory buildings.
 - 5. None of the following structural irregularities is present: Type 1,4 or 5 of Table I6-L, and Type 1 or 4 of Table I6-M.

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BASIC STRUCTURAL				HEIGHT LIMIT FOR SEISMIC ZONES 3 AND 4 (feet)
SYSTEM ²	LATERAL-FORCE-RESISTING SYSTEM DESCRIPTION	R	W.	X 304.8 for mm
1. Bearing wall system	Light-framed walls with shear panels a. Wood structural panel walls for structures three stories or less	5.5 4.5	2.8 2.8	65 65
	b. All other light-framed walls 2. Shear walls a. Concrete	4.5 4.5	2.8 2.8	160 160
	b. Masonry 3. Light steel-framed bearing walls with tension-only bracing	2.8	2.2	65
	Braced frames where bracing carries gravity load a. Steel b. Concrete ³	4.4 2.8 2.8	2.2 2.2 2.2	160 - <u>3</u> 65
2. Building frame system	c. Heavy timber 1. Steel eccentrically braced frame (EBF) 2. Light-framed walls with shear panels.	7.0	2.8	240
	a. Wood structural panel walls for structures three stories or less	6.5 5.0	2.8 2.8	65 65
	b. All other light-framed walls 3. Shear walls a. Concrete	5.5 5.5	2.8 2.8	240 160
	b. Masonry 4. Ordinary braced frames	5.6	2.2 2.2	35 ⁶
	b. Concrete ³ c. Heavy timber	5.6 5.6	2.2	65
3. Moment-resisting frame	5. Special concentrically braced frames a. Steel 1. Special moment-resisting frame (SMRF)	6.4	2.2	240
system	a. Steel b. Concrete ⁴	8.5 8.5	2.8 2.8	N.L. N.L.
	Masonry moment-resisting wall frame (MMRWF) Intermediate moment-resisting frame (IMRF) a. Steel ⁶	6.5 4.5	2.8	160 35^{6}
	b. Concrete ⁵ 4. Ordinary moment-resisting frame (OMRF)	5.5	2.8	<u>.3</u>
	 a. Steel⁶ b. Concrete⁸ 5. Special truss moment frames of steel (STMF) 	3.5 3.5 6.5	2.8 2.8 2.8	35^{6} $-\frac{3}{2}$ 240
4. Dual systems	Shear walls a. Concrete with SMRF b. Concrete with steel OMRF – Not Permitted	8.5	2.8	N.L.
	c. Concrete with concrete IMRF ⁵ d. Masonry with SMRF	6.5 5.5	2.8 2.8	-5 160
	e. Masonry with steel OMRF – Not Permitted f. Masonry with concrete IMRF ³ g. Masonry with masonry MMRWF	4.2 6.0	2.8 2.8	- <u>3</u> 160
	2. Steel EBF a. With steel SMRF	8.5	2.8	N.L.
	 b. With steel OMRF – Not Permitted 3. Ordinary braced frames – Not Permitted 4. Special concentrically braced frames a. Steel with steel SMRF b. Steel with steel OMRF – Not Permitted 5. Steel IMRF – Not Permitted 	7.5	2.8	N.L.
5. Cantilevered column building systems	1. Cantilevered column elements	2.2	2.0	35^{7}
6. Shear wall-frame interaction systems	1. Concrete ⁸	5.5	2.8	160
7. Undefined systems	See Section 1629.6.7 and 1629.9.2			

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'See Section 1630.4 for combination of structural systems.

²Basic structural systems are defined in Section 1629.6

³Prohibited in Seismic Zones 3 and 4.

⁴Includes precast concrete conforming to Section 1921.2.7.

⁵Prohibited in Seismic Zones 3 and 4, except as permitted in Section 1634..2

⁶In Seismic Zones 3 and 4, steel IMRF's, OMRF's and steel ordinary braced frames are permitted as follows:

^{6.1}Structures using steel IMRF's and OMRF's are permitted to a height of 35 feet where the total dead weight of the floors, walls and roof do not exceed 35 psf or for single-story buildings where the moment joints of field connections are constructed of bolted end plates and the dead load of the roof does not exceed 15 psf, the height is permitted to be increased to 60 feet.

 $^{6.2}$ Steel ordinary braced frames are permitted in penthouse structures and in other one-story buildings or structures where the total dead weight of the roof does not exceed 15 psf, and the height of the building or structure does not exceed 60 feet.

⁷Total height of the building including cantilevered columns ⁸Prohibited in Seismic Zones 2A, 2B, 3 and 4. See Section 1633.2.7.

II-3-2.12 The California Building Code is amended as follows: Section 1630.2.3.4, Applicability, is renumbered to Section 1630.2.3.5. A new Section 1530.2.3.4, Horizontal Distribution, is added:

> 1630.2.3.4 Horizontal Distribution. Diaphragms constructed of untopped steel decking or wood structural panels or similar light-frame construction are permitted to be considered as flexible.

1630.2.3.5 **Applicability.** Sections 1630.1.2, 1630.1.3, 1630.2.1, 1630.2.2, 1630.5, 1630.9, 1630.10 and 1631 shall not apply when using the simplified procedure.

EXCEPTION: For buildings with relatively flexible structural systems, the Chief Building Official may require consideration of $P\Delta$ effects and drift in accordance with Sections 1630.1.3, 1630.9 and 1630.10. Δ_s shall be prepared using design seismic forces from Section 1630.2.3.2

II-3-2.13 Section 1630.4.2 of the California Building Code, 2001 Edition, is amended to read as follows:

> 1630.4.2 **Vertical combinations.** The value of *R* used in the design of any story shall be less than or equal to the value of R used in the given direction for the story above.

EXCEPTION: This requirement need not be applied to a story where the dead weight above that story is less than 10 percent of the total dead weight of the structure.

Structures may be designed using the procedures of this section under the following conditions:

- 1. The entire structure is designed using the lowest *R* of the lateral-force-resisting systems used, or
- 2. The following two-stage static analysis procedures may be used for structures conforming to Section 1629.8.3, Item 4.
 - 2.1 The flexible upper portion shall be designed as a separate structure, supported laterally by the rigid lower portion, using the appropriate values of R and ρ
 - 2.2 The rigid lower portion shall be designed as a separate structure using the appropriate values of R and ρ . The reactions from the upper portion shall be those determined from the analysis of the upper portion multiplied by the ratio of the (R/ρ) of the upper portion over (R/ρ) of the lower portion. This ratio shall not be taken less than 1.0.
- II-3-2.14 Section 1630.7 of the California Building Code, 2001 Edition, is amended to read as follows:

1630.7 **Horizontal Torsional Moments.** Provisions shall be made for the increased shears resulting from horizontal torsion where diaphragms are not flexible. The most severe load combination for each element shall be considered for design.

The torsional design moment at a given story shall be the moment resulting from eccentricities between applied design lateral forces at levels above that story and the vertical-resisting elements in that story plus an accidental torsion.

The accidental torsional moment shall be determined by assuming the mass is displaced as required by Section 1630.6.

Where torsional irregularity exists, as defined in Table 16-M, the effects shall be accounted for by increasing the accidental torsion at each level by an amplification factor, Ax, determined from the following formula:

$$Ax = [\delta_{\text{MAX}} \pm 1.2 \delta_{\text{avg}}]^2$$
 (30-16)

WHERE:

 δ_{avg} = the average of the story drift at the extreme points of the structure at Level x. δ_{max} = the maximum displacement story drift at Level x.

The value of Ax need not exceed 3.0.

II-3-2.15 Section 1630.8.2.1 of the California Building Code, 2001 Edition is amended to read as ollows:

1630.8.2.1 **General.** Where any portion of the lateral-load-resisting system is discontinuous, such as for vertical irregularity Type 4 in Table 16-L or plan irregularity Type 4 in Table 16-M, columns, beams, trusses or slabs supporting such discontinuous systems shall have the design strength to resist the combination loads resulting from the special seismic load combinations of Section 1612.4. The connections of such discontinued elements to the supporting members shall be adequate to transmit the forces for which the discontinuous elements were required to be designed.

EXCEPTIONS: 1. The quantity *Em* in Section 1612.4 need not exceed the maximum force that can be transferred to the element by the lateral-force-resisting system.

2. Concrete slabs supporting light-frame wood shear wall systems or light-frame steel and wood structural panel shear wall systems.

For Allowable Stress Design, the design strength may be determined using an allowable stress increase of 1.7 and a resistance factor, Φ , of 1.0. This increase shall not be combined with the one- third stress increase permitted by Section 1612.3, but may be combined with the duration of load increase permitted in Chapter 23, Division III.

II-3-2.16

Sections 1630.8.8.2, 1630.10.2 and 1630.10.3 of the California Building Code, 2001 Edition, are amended to read as follows:

1630.8.2.2 **Detailing requirements in Seismic Zones 3 and 4.** In Seismic Zones 3 and 4, elements supporting discontinuous systems shall meet the following detailing or member limitations:

- 1. Reinforced concrete or reinforced masonry elements designed primarily as axial-load members shall comply with Section 1921.4.4.5. 2.
- 2. Reinforced concrete elements designed primarily as flexural members and supporting other than light-frame wood shear wall systems or light-frame steel and wood structural panel shear wall systems shall comply with Sections 1921.3.2 and 1921.3.3. Strength computations for portions of slabs designed as supporting elements shall include only those portions of the slab that comply with the requirements of these Sections.
- 3. Masonry elements designed primarily as axial-load carrying members shall comply with Sections 2106.1.12.4, Item I, and 2108.2.6.2.6.
- 4. Masonry elements designed primarily as flexural members shall comply with Section 2108.2.6.2.5.
- 5. Steel elements designed primarily as flexural members or trusses shall have bracing for both top and bottom beam flanges or chords at the location of the support of the discontinuous system and shall comply with the requirements of AlSC-Seismic Part I. Section 9.4b.

Section 1630.10.2 **Calculated (Story Drift).** Calculated story drift using Δ_m shall not exceed 0.025 times the story height for structures having a fundamental period of less than 0.5 second. For structures having a fundamental period of 0.5 second or greater, the calculated story drift shall not exceed 0.020/ $T^{1/3}$ times the story height.

EXCEPTIONS: (Exceptions 1 and 2 are unchanged)

Section 1630.10.3 **Limitations.** The design lateral forces used to determine the calculated drift may disregard the limitations of Formula (30-6) and (30-7) (Errata Mar. 2001) and may be based on the period determined from Formula (30-10) neglecting the 30 or 40 percent limitations of Section 1630.2.2, Item 2.

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II-3-2.17 Section 1633.2.4 of the California Building Code, 2001 Edition is amended to read as follows:

1633.2.4 **Deformation compatibility.** All structural framing elements and their connections, not required by design to be part of the lateral-force-resisting system, shall be designed and/or detailed to be adequate to maintain support of design dead plus live loads when subjected to the expected deformations caused by seismic forces. $P\Delta$ effects on such elements shall be considered. Expected deformations shall be determined as the greater of the Maximum Inelastic Response Displacement, ΔM , considering $P\Delta$ effects determined in accordance with Section 1630.9.2 or the deformation induced by a story drift of 0.0025 times the story height. When computing expected deformations, the stiffening effect of those elements not part of the lateral-force-resisting sys-tem shall be neglected.

For elements not part of the lateral-force-resisting system, the forces induced by the expected deformation may be considered as ultimate or factored forces. When computing the forces induced by expected deformations, the restraining effect of adjoining rigid structures and nonstructural elements shall be considered and a rational value of member and restraint stiffness shall be used. Inelastic deformations of members and connections are permitted to occur provided the assumed calculated capacities are consistent with member and connection design and detailing.

II-3-2.18 Section 1806.2 of the California Building Code, 2001 Edition is amended by adding the following:

1806.2.1 **Foundations.** All new foundations required due to building additions to existing occupancies shall be of the same type of foundation system as the existing structure. Additions to R3 occupancies without an available soils report and where the existing foundation system is a standard "T" type or a pier and grade beam type, may be constructed as follows at the option of the property owner.

EXCEPTION: A soil report is required for both new residences and additions to residences in Hillside Areas

1806.2.2 General

Footings shall be designed in accordance with the structural provisions of the California Building Code including, where applicable, Table 18-A-I-C and this Chapter.

1806.2.3 Concrete Foundation Piers

Unless the new foundation has been designed by the architect or a registered Civil or Structural Engineer, the building addition must be constructed on a pier and beam type foundation. The concrete piers shall be at least 12 inches in diameter, extend at least 6 feet below pad grade, and have a horizontal center-to-center spacing of no greater than 6 feet.

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Interior floor supports for a building addition constructed with a raised floor (4-inch by 4-inch post on a nailer plate or equal) shall be supported on concrete piers extended at least 8" above pad grade. The piers can be extended using a short section of a sonotube.

1806.2.4 Grade Beams

The connecting grade beams for a building addition constructed with either a raised floor on a concrete slab-on-grade shall be at least 10 inches wide by 16 inches deep. A 1 ½ inch void space shall be created at the bottom of the beam between pier locations.

1806.2.5 Reinforcement

The minimum reinforcement for grade beams shall be two #4 bars at top and two #4 bars at bottom, with #4 ties at 18-inch centers or #3 ties at 12-inch centers. All bars shall have a minimum 3-inch clear cover of concrete. Splices in reinforcement shall be as follows:

- 1. Top steel shall be spliced at mid span between piers.
- 2. Bottom steel shall be spliced over the pier centerline.
- 3. All splices shall have a minimum length of 40 bar diameters and shall be staggered.

Pier reinforcement shall consist of at least three #4 vertical bars with #3 ties at 4" o.c. for upper 18" of pier and 8" o.c. for remaining pier depth vertical bar. This reinforcement shall extend to within 6 inches of the bottom of the pier holes, shall have a minimum 3-inch cover of concrete between each bar and the sides of the pier hole, and shall be aligned with the centerline of the connecting beam. The vertical bar(s) of each pier shall extend into the grade beam and have a minimum 12-inch standard hook with the top bar of the connecting footing.

Reinforcement is required in concrete floor slabs constructed on grade. The slab shall be reinforced with not less than six inches by six inches by ten-gauge wire mesh or an approved alternate installed at mid height of the slab.

1806.2.6 Concrete

All concrete used to construct foundations or concrete slab-on-grade for building additions shall comply with the requirements of the California Building Code and shall have a minimum specified 28-day compressive strength (fc) of 2500 psi.

1806.2.7 Concrete Slab-on-Grade

Interior concrete slab-on-grade shall be at least 3-1/2 inches thick and be constructed on a capillary break that has been placed on a stabilized subgrade and is capped with a vapor barrier. The capillary break should be at least 4 inches thick and consist of a free-

draining material, such as 3/8" pea gravel or a permeable aggregate complying with CALTRANS Standard Specifications, Section 68, Class 1, Type A or Type B. The membrane vapor barrier should be a high quality membrane such as 6 mil polyethylene. A minimum 2-inch-thick protective cushion of sand or capillary break material should be placed over the membrane.

Where interior wall loads are to be carried by the floor slab, the slab section shall be thickened to 12 inches and founded directly on the undisturbed subgrade.

The soil subgrade should be brought to moisture equilibrium by covering it with an impervious membrane for a minimum period of two weeks before placement of the concrete floor slab. The covering should be equivalent to at least a 6 mil polyethylene. Rock to be used as capillary break may be used to keep the basal membrane in place.

II-3-2.19 Section 1900.4.4 of the California Building Code, 2001 Edition, is amended as follows:

Minimum Slab Thickness (a) General. The minimum thickness of concrete floor slabs supported directly on the ground shall not be less than 3-1/2 inches. The slab shall be reinforced with not less than six inches by six inches ten-gauge wire mesh or an approved alternate installed at mid height of the slab.

II-3-2.20 Section 1915.2.2 of the California Building Code, 2001 Edition, is amended to read as follows:

1915.2.2 **Base area of footing.** Base area of footing or number and arrangement of piles shall be determined from the external forces and moments (transmitted by footing to soil or piles) and permissible soil pressure or permissible pile capacity selected through principles of soil mechanics. External forces and moments are those resulting from the load combinations of Section 1612.3.

II-3-2.21 Section 2204 of the California Building Code, 2001 Edition, is amended to read as follows:

Design shall be by one of the following methods.

2204.1 **Load and Resistance Factor Design.** Steel design based on load and resistance factor

design method shall resist the factored load combinations of section 1612.2 in accordance with the applicable requirements of section 2205.

2204.2 **Allowable Stress Design.** Steel design based on allowable stress design methods shall resist the factored load combinations of section 1612.3 in accordance with the applicable requirements of section 2205.

II-3-2.22 Sections 2205.3, 2210, 2211, 2212 and Chapter 22, Divisions IV and V of the California Building Code, 2001 Edition, are amended as follows:

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2205.3 **Seismic Design Provisions for Structural Steel.** Steel structural elements that resist seismic forces shall, in addition to the requirements of Section 2205.2 be designed in accordance with Division IV.

II-3-2.23 Division IV consisting of Sections 2210 and 2211 is deleted in its entirety.

II-3-2.24 Division IV (A), Sections 2210.1 and 2211.1 is added to the California Building Code, 2001 Edition, to read as follows:

2210.1 **Adoption.** Except for the modifications as set forth in Sections 2211 and 2212 of this division and the requirements of the Building Code, the seismic design, fabrication, and erection of structural steel shall be in accordance with the *Seismic Provisions for Structural Steel Buildings*, April 15, 1997 published by the American Institute of Steel Construction, 1 East Wacker Drive, Suite 3100, Chicago, IL 60601, as if set out at length herein. The adoption of *Seismic Provisions for Structural Steel Buildings* in this Division, hereinafter referred to as AISC-Seismic, shall include Parts I (LRFD), and III (ASD): and Supplement No.2, dated November 10, 2000.

Where other codes, standards, or specifications are referred to in this specification, they are to be considered as only an indication of an acceptable method or material that can be used with the approval of the Building Official.

2211.1 **Design Methods.** When the load combinations from Section 1612.2 for LRFD are used, structural steel buildings shall be designed in accordance with Chapter 22 Division II (AISC-LRFD) and Part I of AISC-Seismic as modified by this Division.

When the load combinations from Section 1612.3 for ASD are used, structural steel buildings shall be designed in accordance with Chapter 22 Division III (AISC-ASD) and Part III of AISC- Seismic as modified by this Division.

II-3-2.25 Division V consisting of Sections 2212, 2213 and 2214 is deleted in its entirety.

II-3-2.26 Division V(A), Sections 2212.1 and 2212.2 are added to the California Building Code, 2001 Edition, to read as follows;

2212.1 **Criteria Amendments.** The AISC-Seismic adopted by this Division apply to the seismic design of structural steel members except as modified by this Section.

The following terms that appear in AISC-Seismic shall be taken as indicated in the 2001 California Building Code.

AISC-Seismic Seismic Force Resisting System Lateral Force Resisting System Design Earthquake Design Basis Ground Motion Load Combinations Eqs. (4-1) and (4-2) Chapter 16 Eqs. (12-17) and (12-18) respectively LRFD Specification Section Eqs. (A4-1) through (A4-6) Chapter 16 Eqs. (12-1) through (12-6 respectively

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2212.2 Amendments of AISC Seismic Provisions.

PART I, Section 1 of the AISC Seismic Provisions is revised as follows:

1. SCOPE. These provisions are intended for the design and construction of structural steel members and connections in the Seismic Force Resisting Systems in buildings for which the design forces resulting from earthquake motions have been determined on the basis of various levels of energy dissipation in the inelastic range of response. These provisions shall apply to buildings in Seismic Zone 2 with an importance factor I greater than one, in Seismic Zone 3 and 4 or when required by the Engineer of Record. These provisions shall be applied in conjunction with, Chapter 22, Division II, hereinafter referred to as the LRFD Specification. All members and connections in the Lateral Force Resisting System shall have a design strength as provided in the LRFD Specification to resist load combinations 12-1 through 12-6 (in Chapter 16) and shall meet the requirements in these provisions.

Part I includes a Glossary, which is specifically applicable to this Part, and Appendix S.

2. PART I, Sec. 4.1, first paragraph of the AISC Seismic Provisions is revised as follows:

LOADS and LOAD COMBINATIONS. The loads and load combinations shall be those in Section 1612.2 except as modified throughout these provisions.

II-3-2.27 Chapter 23, Division III, Part I and Sections 2316.1 and 2316.2 are amended as follows;

Part I Allowable Stress Design of Wood.

This standard, with certain exceptions, is the ANSI/NFoPA NDS-97 National Design Specification for Wood Construction of the American Forest and Paper Association, 1997 Edition, and the Supplement to the 1997 Edition, National Design Specification, adopted by reference.

The National Design Specification for Wood Construction, 1997 Edition, and supplement are available from the American Forest and Paper Association, 1111 19th Street, NW, Eighth Floor, Washington, DC, 20036.

II-3-2.28 Section 2316.1 of the California Building Code, 2001 Edition, is amended by changing the first sentence of the paragraph to read as follows:

2316.1 **Adoption and Scope.** The National Design Specification for Wood Construction, 1997 Edition (NDS), which is hereby adopted as a part of this code, shall apply to the design and construction of wood structures using visually graded lumber, mechanically graded lumber, structural glued laminated timber, and timber piles.

Item 27 including NDS Table 5A is deleted.

II- 3-2.29 Section 2320.11.3, Items 5 & 7 of the California Building Code, 2001 Edition, are amended as follows:

2320.11.3 Bracing (Conventional Construction Provisions)

Item 5 is deleted in its entirety.

Item 7 is amended to read as follows:

Portland cement plaster on studs spaced 16 inches on center installed in accordance with Table No. 25-I is limited to single story R-3 and U-1 occupancies.

II-3-2.30 **2902.4 Food Consumed on the Premises**

Notwithstanding anything to the contrary contained in or inferable from the applicable California Building Code, or in this Chapter, every establishing selling food for consumption on the premises of said establishment (at tables or counters or otherwise) shall have at least one (1) toilet room (with toilet and wash basin) for the use of employees and customers. The provisions of this Section shall not apply to an establishment which sells food exclusively for take-out (i.e. consumption off the premises) and which does not have tables, counters or other places or facilities for customers to consume food on the premises excepting that employees of all food facilities shall have access to toilet and hand-washing facilities as required by this code and as required by the health department.

Section 3 REPEAL OF CONFLICTING ORDINANCES

II-3-3.01 Upon adoption of each new Building Code, as amended, the previous adopted Building Code is superseded in its entirety.

Section 4 SEVERABILITY

The City Council declares that, should any provision, section, paragraph, sentence, or word of this amendment be rendered or declared invalid by a court of competent jurisdiction or by reason of any preemptive legislation, the remaining provisions, sections, paragraphs, sentences or words of said chapter hereby adopted shall remain in full force and effect.

Section 5 EFFECTIVE DATE

This ordinance shall become effective on November 1, 2002

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